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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|---------------|----------------------|---------------------|------------------|
| 09/807,947 | 05/10/2001 | Wolfgang Mehr | 010456 | 9291 |
| 75 | 90 11/06/2003 | | EXAMINER | |
| Law Office of Karl Hormann | | | EASTHOM, KARL D | |
| 86 Sparks Stree | t | | | |
| Cambridge, MA 02138-2216 | | | ART UNIT | PAPER NUMBER |
| • | | · | 2832 | |

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Applicati n N . Applicant(s) – | | | | | |
|---|-------------|--|--|--|--|
| | | | | | |
| f 09/807,947 MEHR, WOLFGANG | | | | | |
| Office Action Summary Examiner Art Unit | | | | | |
| . Karl D Easthom 2832 | | | | | |
| The MAILING DATE of this communication appears on the c ver sheet with the correspondence address Period for Reply | SS | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING-DATE-OF-THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status | inication. | | | | |
| 1) Responsive to communication(s) filed on 15 May 2003. | | | | | |
| 2a) This action is FINAL . 2b) This action is non-final | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the model closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disp sition of Claims | erits is | | | | |
| 4) Claim(s) 3,4,6-11 and 13 is/are pending in the application. | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | |
| 6)⊠ Claim(s) <u>3,4,6-11 and 13</u> is/are rejected. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| 11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner. | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | |
| a)⊠ All b)□ Some * c)□ None of: | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Sta application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | ge | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional ap | plication). | | | | |
| a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. — | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) | | | | | |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 2. Claims 3-4, 6-8, 10-11 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Fiorini et al. Fiorini discloses the claimed invention at Figs. 5a-5b with polycrystalline SiGe resistor 46, contacts 47, silicon substrate 41, dielectric layer 42, and dielectric substance 45 (the two meeting embedded of claim 6). Boron is doped, and annealing performed, at col. 8, lines 57-67, for claims 4, 10, and 13. For claim 11, germanium is as noted.
- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claim 9 is rejected under 35 U.S.C. 103(a) as obvious over Fiorini et al. Fiorini

discloses the invention as noted above, except deposition in amorphous form. Fiorini discloses

that it is known to employ amorphous SiGe as a bolometer at col. 2, lines 18-25, for the purpose

of decreasing the 1/f noise, and it would have been obvious to employ the amorphous form

where polycrystalline forms of SiGe are noted in the same passage, and Fiorini discloses at col. 4

using the latter form to control noise in a bolometer

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Karl D Easthom whose telephone number is 703 308-3306. The

examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Elvin Enad can be reached on 703 308-1976. The fax phone number for the

organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703 308-0956.

Karl D Easthom
Primary Examiner

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KDE